



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/696,629

10/29/2003

Michael R. Smith

CIS0195US

5549

33031 7590 01/28/2010
CAMPBELL STEPHENSON LLP
11401 CENTURY OAKS TERRACE
BLDG. H, SUITE 250
AUSTIN, TX 78758

EXAMINER

NOBAHAR, ABDULHAKIM

ART UNIT

PAPER NUMBER

2432

MAIL DATE

DELIVERY MODE

01/28/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/696,629	Applicant(s) SMITH, MICHAEL R.	
	Examiner ABDULHAKIM NOBAHAR	Art Unit 2432	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37,39-56,58-75,77-93 and 96-118 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17,20-37,39-42,45-56,58-61,64-75,77-80,83-93,96-102,104-115,117 and 118 is/are rejected.
- 7) ☒ Claim(s) 18,19,43,44,62,63,81,82,103 and 116 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>11/12/2009, 12/08/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to applicant's amendment filed on 10 November 2009.
2. Claims 1-37, 39-56, 58-75, 77-93 and 96-118 are pending.

Response to Arguments

Applicant's arguments with respect to the objection and rejections under 35 USC § 101 and 102 have been considered fully considered and are persuasive. Therefore, the rejections and the objection have been withdrawn. However, upon further consideration of the amended claims, a new ground(s) of rejection is made.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 71-75 and 77-89 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitations of claims claim 71-75 and 77-89 use the phrase "means for", but it is modified by some structure, material, or acts recited in the claim. It is unclear whether the recited structure, material, or acts are sufficient for performing the claimed function which would preclude application of 35 U.S.C. 112, sixth paragraph, because the

Art Unit: 2432

specification does not provide any specific structure closely associated to the recited functions in these claims. For instance, there are no descriptions in the disclosure for means (i.e., structure) that is used for comparing first security level information and second security level information, means for setting said security level of a port, means for storing said second security level in a label range information field of a forwarding table entry and means for any other functions performed in these claims. One skilled in the art cannot know what structure is meant for "means for" since no algorithms for performing the functions are described.

A general allegation that these are simple programs that one skilled in the art can make is not sufficed. In order to meet the requirements for a claim in "means plus function" format the relevant algorithms should be disclosed in the specification. If applicant wishes to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to amend the claim so that the phrase "means for" or "step for" is clearly **not** modified by sufficient structure, material, or acts for performing the claimed function.

If applicant does **not** wish to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant is required to amend the claim so that it will clearly not be a means (or step) plus function limitation (e.g., deleting the phrase "means for" or "step for").

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-17, 20-37, 39-42, 45-56, 58-61, 64-75, 77-80, 83-93, 96-102, 104-115, 117 and 118 are rejected under 35 U.S.C. 102(b) as being anticipated by Antur et al (US 6,2124,558 B1).

With regard to claims 1, 2, 11, 14, 27, 33, 34, 39, 49, 52, 53, 68, 71, 72, 77, 87, 90, 96, 99, 101 and 109, Antur discloses:

A method and a system (see, e.g., col. 5, lines 25-65) comprising:

a network interface (see, e.g., col. 7, lines 1-8);

a processor (see, e.g., col. 2, lines 50-55);

a computer readable storage medium coupled to said processor (see, e.g., col. 2, lines 50-55);

computer instructions, encoded in said computer readable storage medium (see, e.g., col. 2, lines 50-63),

comparing first security level information and second security level information (see, e.g., col. 4, lines 25-40);

said first security level information represents a first security level,

said second security level information represents a second security level (see, e.g., col. 2, lines 50-63),

said means for comparing is coupled to said network interface (see, e.g., col. 2, lines 50-63, where the firewall corresponds to the recited means for comparing);

said first security level information is stored in a security label of a packet received at a network node of a network (see, e.g., col. 4, lines 29-34, where the packet header stores the packet security level),

said second security level information is stored at said network node, after being received from another network node of said network (see, e.g., col. 4, lines 29-34, where the firewall security corresponds to the recited second security level information; col. 5, lines 1-10),

said network comprises a plurality of network nodes, said network nodes comprise said network node and said another network node (see, e.g., Fig. 2, col. 4, lines 63-67, where the firewall or the router is a node of the network), and

said network nodes are configured to convey packets to one another via others of said network nodes (see, e.g., Fig. 3, col. 4, lines 41-65); and

indicating processing to be performed on said packet based on said comparing (see, e.g., col. 4, lines 59-65, where allowing a specific type of packet to go through the firewall is the indication of the type of process being performed on the packet),

wherein said processing comprises

determining whether to forward said packet from said network node to one of said network nodes (see, e.g., col. 4, lines 59-67, where if the packet is of the type that is not allowed to pass the firewall then it would be filtered which is a determination for forwarding).

With regard to claims 3, 105 and 106, Antur discloses:

Art Unit: 2432

The method of claim 1, wherein

said first security level and said second security level implement one of a multi-level security paradigm and a multi-lateral security paradigm (see, e.g., col. 4, lines 25-30, where the three levels of security are multi-lateral security paradigm ; col. 5, lines 10-20).

With regard to claim 4, Antur discloses:

The method of claim 1, wherein said security label is one of an enumerated security label and a bitmap security label (see, e.g., col. 4, lines 30-34).

With regard to claims 5, 91 and 98, Antur discloses:

The method of claim 1, wherein said second security level is a security level of a port of said network node (see, e.g., col. 2, lines 7-17).

With regard to claims 6 and 93, Antur discloses:

The method of claim 5, further comprising:

setting said security level of said port (see, e.g., col. 4, lines 36-39).

With regard to claims 7, 36, 40, 74, 78, 104, 107, 108, 110 and 111, Antur discloses:

The method of claim 6, wherein said setting said security level of said port comprises:

Art Unit: 2432

storing said second security level in a security label information field of an access control list entry (see, e.g., col. 5, lines 47-55; col. 8, lines 55-67).

With regard to claims 8, 37, 41, 56, 60, 75, 79, 112 and 114, Antur discloses:

The method of claim 6, wherein said setting said security level of said port comprises:

storing said second security level in a label range information field of a forwarding table entry (see, e.g., col. 6, lines 47-56, configuration information).

With regard to claim 9, Antur discloses:

The method of claim 1, wherein said processing comprises:

dropping said packet, if said comparing indicates that said first security level is less than said second security level (see, e.g., col. 6, lines 47-56, security characteristic).

With regard to claim 10, Antur discloses:

The method of claim 1, wherein said processing comprises at least one of dropping said packet, redirecting said packet and rewriting said security label (see, e.g., col. 6, lines 57-59; col. 17, lines 28-36, where).

With regard to claims 12 and 100, Antur discloses:

The method of claim 11, wherein

Art Unit: 2432

said security levels are a range of security levels (see, e.g., col. 1, lines 50-62).

With regard to claim 13, Antur discloses:

The method of claim 12, wherein said processing comprises:

dropping said packet, if said comparing indicates that said first security level is not within said range of security levels (see, e.g., col. 4, lines 52-56).

With regard to claims 15, 55 and 59, Antur discloses:

The method of claim 14, wherein said storing comprises:

storing said second security level in a security label information field of an access control list entry (see, e.g., col. 5, lines 47-55; col. 8, lines 55-67).

With regard to claim 16, Antur discloses:

The method of claim 14, wherein said storing comprises:

storing said second security level in a label range information field of a forwarding table entry (see, e.g., col. 5, lines 35-45).

With regard to claims 17, 42, 61, 80 and 102, Antur discloses:

The method of claim 14, wherein said storing comprises:

communicating said second security level from a first network node by registering said second security level in a context (see, e.g., col. 3, lines 63-67, col. 8, lines 58-67).

Art Unit: 2432

With regard to claim 20, Antur discloses:

The method of claim 14, wherein said storing comprises:

storing said second security level in a label range information field of forwarding table (see, e.g., col. 6, lines 47-56, configuration information).

With regard to claim 21, Antur discloses:

The method of claim 14, wherein said storing comprises:

storing said second security level in a port of said network node (see, e.g., col. 4, lines 36-39).

With regard to claims 22 and 92, Antur discloses:

The method of claim 21, wherein

said port is an egress port (see, e.g., col. 4, lines 36-39).

With regard to claims 23, 45, 64 and 83, Antur discloses:

The method of claim 1, further comprising:

determining said first security level (see, e.g., col. 2, lines 35-45).

With regard to claims 24, 47, 66 and 85, Antur discloses:

The method of claim 23, wherein said determining comprises:

determining if an ingress port is marked as an access port ; and

Art Unit: 2432

setting a security level of said ingress port to said first security level, if said ingress port is marked as an access port (see, e.g., col. 4, lines 36-39; col. 5, lines 41-45).

With regard to claims 25, 48, 67 and 86, Antur discloses:

The method of claim 24, further comprising:

setting said first security level information to said security level of said ingress port (see, e.g., col. 5, lines 45-52).

With regard to claims 26, 46, 65 and 84, Antur s discloses:

The method of claim 23, further comprising:

authenticating a user having said first security level, wherein said determining is performed only if said user is authenticated (see, e.g., col. 1, lines 10-16; col. 4, lines 53-62).

With regard to claims 28, 50, 69 and 88, Antur s discloses:

The method of claim 27, wherein said performing said processing comprises:

Performed said forwarding of said packet, if said indicating indicates that said packet is allowed to be forwarded; and dropping said packet, otherwise (see, e.g., col. 5, lines 17-27 and col. 5, lines 42-50).

Art Unit: 2432

With regard to claim 29, Antur discloses:

The method of claim 27, wherein said performing said processing comprises:

forwarding said packet to a firewall, if said indicating indicates that said packet should be forwarded to said firewall (see, e.g., col. 4, lines 47-55).

With regard to claims 30, 51, 70, 89 and 97, Antur discloses:

The method of claim 1, further comprising:

stripping network security information from said packet; and adding subnetwork security information to said packet (see, e.g., col. 5, lines 17-30).

With regard to claim 31, Antur discloses:

The method of claim 30, wherein

said network security information comprises said first security level information (see, e.g., col. 4, lines 47-57, where the passing of the packet through the security device to access a network implies that the security level of the network either is the same as the security level of the security device or at acceptable range and the security level of the packet is acceptable by security device).

With regard to claim 32, Antur discloses:

The method of claim 30, wherein

Art Unit: 2432

said subnetwork security information comprises said first security level information (see, e.g., col. 4, lines 45-57, where the passing of the packet through the security device to access a network implies that the security level of the network either is the same as the security level of the security device or at acceptable range and the security level of the packet is acceptable by security device).

With regard to claims 35, 54 and 73, Antur discloses:

The computer system of claim 33, wherein said computer instructions are further configured to cause said processor to:

set said security level of a port, wherein

said second security level is a security level of said port of said network node (see, e.g., col. 4, lines 35-46).

With regard to claim 113, Antur discloses:

The network device of claim 112, wherein said at least one forwarding table entry further comprises:

a port identifier field, wherein a port identifier stored in said port identifier field identifies a port (see, e.g., col. 4, lines 35-46, it is inherent that the port identifier is stored in an identifier field).

With regard to claim 115, Antur s discloses:

The network device of claim 113, wherein said at least one forwarding table entry further comprises:

a media access control (MAC) address field (see, e.g., col. 3, lines 35-41); and
a virtual local area network (VLAN) identifier field, wherein a combination of said MAC address field and said VLAN identifier field are associated with said port identifier field and said label range field (see, e.g., col. 3, lines 35-41; col. 4, lines 14-20).

With regard to claim 117, Antur discloses:

The network device of claim 114, wherein said at least one forwarding table entry further comprises:
a media access control (MAC) address field configured to store a MAC address (see, e.g., col. 3, lines 35-41), wherein said MAC address is associated with a security label stored in said label range field (see, e.g., col. 3, lines 35-41; col. 4, lines 14-20).

With regard to claim 118, Antur discloses:

The network device of claim 112, wherein said at least one forwarding table entry further comprises:

a virtual local area network (VLAN) identifier field, wherein a VLAN identifier stored in said VLAN identifier field identifies a VLAN, and said VLAN is associated with a security label stored in said label range field (see, e.g., col. 3, line 63-col. 4, line 20; col. 7, lines 36-40).

Allowable Subject Matter

Claims 18, 19, 43, 44, 62, 63, 81, 82, 103 and 116 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ABDULHAKIM NOBAHAR whose telephone number is (571)272-3808. The examiner can normally be reached on M-T 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system.

/A. N./
Abdulhakim Nobahar
Examiner, Art Unit 2432

/Gilberto Barron Jr./
Supervisory Patent Examiner, Art Unit 2432